Available online at www.sciencedirect.com

SCIENCE DIRECT®

Geoderma 124 (2005) 429–430

GEODERMA

www.elsevier.com/locate/geoderma

Contents Volume 124, 2005

Publisher's note 1

Review

Soil structure and management: a review
C.J. Bronick and R. Lal 3

Research papers

Historical development of key concepts in pedology
J.G. Bockheim, A.N. Gennadiyev, R.D. Hammer and J.P. Tandarich 23

The stable carbon isotope composition of soil organic carbon and pedogenic carbonates along a bioclimatic gradient in the Palouse region, Washington State, USA
B.A. Stevenson, E.F. Kelly, E.V. McDonald and A.J. Busacca 37

The biogeochemistry of phosphorus across an alpine topographic/snow gradient
M.I. Litaor, T.R. Seastedt, M.D. Walker, M. Carbone and A. Townsend 49

Urban soil pollution in Damascus, Syria: concentrations and patterns of heavy metals in the soils of the Damascus Ghouta
A. Möller, H.W. Müller, A. Abdullah, G. Abdelgawad and J. Utermann 63

Biomechanical effects, lithological variations, and local pedodiversity in some forest soils of Arkansas
J.D. Phillips and D.A. Marion 73

Competitive sorption of cadmium and lead in acid soils of Central Spain
S. Serrano, F. Garrido, C.G. Campbell and M.T. García-González 91

Kinetics of selenite desorption by phosphate from hydroxyaluminum- and hydroxyaluminosilicate-montmorillonite complexes
U.K. Saha, C. Liu, L.M. Kozak and P.M. Huang 105

On the critical salt concentrations for particle detachment in homogeneous sand and heterogeneous Hanford sediments
T. Blume, N. Weisbrod and J.S. Selker 121

Organic carbon and its fractions in paddy soil as affected by different nutrient and water regimes
C. Yang, L. Yang and Z. Ouyang 133

Soil organic matter fractions as early indicators for carbon stock changes under different land-use?
J. Leifeld and I. Kögel-Knabner 143

Estimating nitrate, dissolved organic carbon and DOC fractions in forest floor leachates using ultraviolet absorbance spectra and multivariate analysis
M. Simonsson, K. Kaiser, R. Danielsson, F. Andreux and J. Ranger 157

Soil–plant relationships and tree distribution in old growth *Nothofagus betuloides* and *Nothofagus pumilio* forests of Tierra del Fuego
J. Romanyà, J. Fons, T. Sauras-Yera, E. Gutiérrez and V.R. Vallejo 169

Spatial distribution characteristics of organic matter and total nitrogen of marsh soils in river marginal wetlands
J. Bai, H. Ouyang, W. Deng, Y. Zhu, X. Zhang and Q. Wang 181

Ability of different plant species to promote microbiological processes in semiarid soil
C. Garcia, A. Roldan and T. Hernandez 193

Accumulation of carbon, nitrogen and phosphorus during soil formation on alder spoil heaps after brown-coal mining, near Sokolov (Czech Republic)
M. Šourková, J. Frouz and H. Šantrůčková 203
Effects of land-use changes on humus forms on alpine pastureland (Central Alps, Tyrol)
J. Seeber and G.U.H. Seeber 215
Continuous soil pollution mapping using fuzzy logic and spatial interpolation
M. Amini, M. Afyuni, N. Fathianpour, H. Khademi and H. Flühler 223
Empirical reformulation of the universal soil loss equation for erosion risk assessment in a tropical watershed
M.J. Cohen, K.D. Shepherd and M.G. Walsh 235
Classification of anthrosols with vitric/andic properties derived from lignite ash
S. Zikeli, M. Kastler and R. Jahn 253
Estimating hydraulic conductivity of a fine-textured soil using tension infiltrometry
D. Ventrella, N. Losavio, A.V. Vonella and F.J. Leij 267
Splash distance and size distributions for various soils
C. Legout, S. Leguédois, Y. Le Bissonnais and O. Malam Issa 279
Development of pedotransfer functions using a group method of data handling for the soil of the Pianura Padano–Veneta region of North Italy: water retention properties
F. Ungaro, C. Calzolari and E. Busoni 293
Characteristics of soil organic matter of different Brazilian Ferralsols under native vegetation as a function of soil depth
D.P. Dick, C. Nunes Gonçalves, R.S.D. Dalmolin, H. Knicker, E. Klamt, I. Kögel-Knabner, M.L. Simões and L. Martin-Neto 319
Displacement of Zn through acidic light-textured soils
R. Carrillo Gonzalez, D.L. Rowell and B.J. Alloway 335
Functional diversity of soil microbial community, rock phosphate dissolution and growth of *Acacia seyal* as influenced by grass-, litter- and soil-feeding termite nest structure amendments
R. Duponnois, M. Paugy, J. Thioulouse, D. Masse and M. Lepage 349
Effect of soil composition on adsorption of lead as reflected by a study on a natural forest soil profile
P. Sipos, T. Németh, I. Mohai and I. Dódony 363
Plant type mediates rhizospheric microbial activities and soil aggregation in a semiarid Mediterranean salt marsh
F. Caravaca, M.M. Alguacil, P. Torres and A. Roldán 375
Australia-wide predictions of soil properties using decision trees
B.L. Henderson, E.N. Bui, C.J. Moran and D.A.P. Simon 383
TDR estimation of electrical conductivity and saline solute concentration in a volcanic soil
R. Muñoz-Carpena, C.M. Regalado, A. Ritter, J. Alvarez-Benedí and A.R. Socorro 399
Cleavage of ^{14}C-labeled glycine and its polycondensation with pyrogallol as catalyzed by birnessite
M.C. Wang and P.M. Huang 415

Book review 427

Contents Volume 124, 2005 429